

REPORT

OF THE

SUPERINTENDENT OF THE YELLOWSTONE NATIONAL PARK

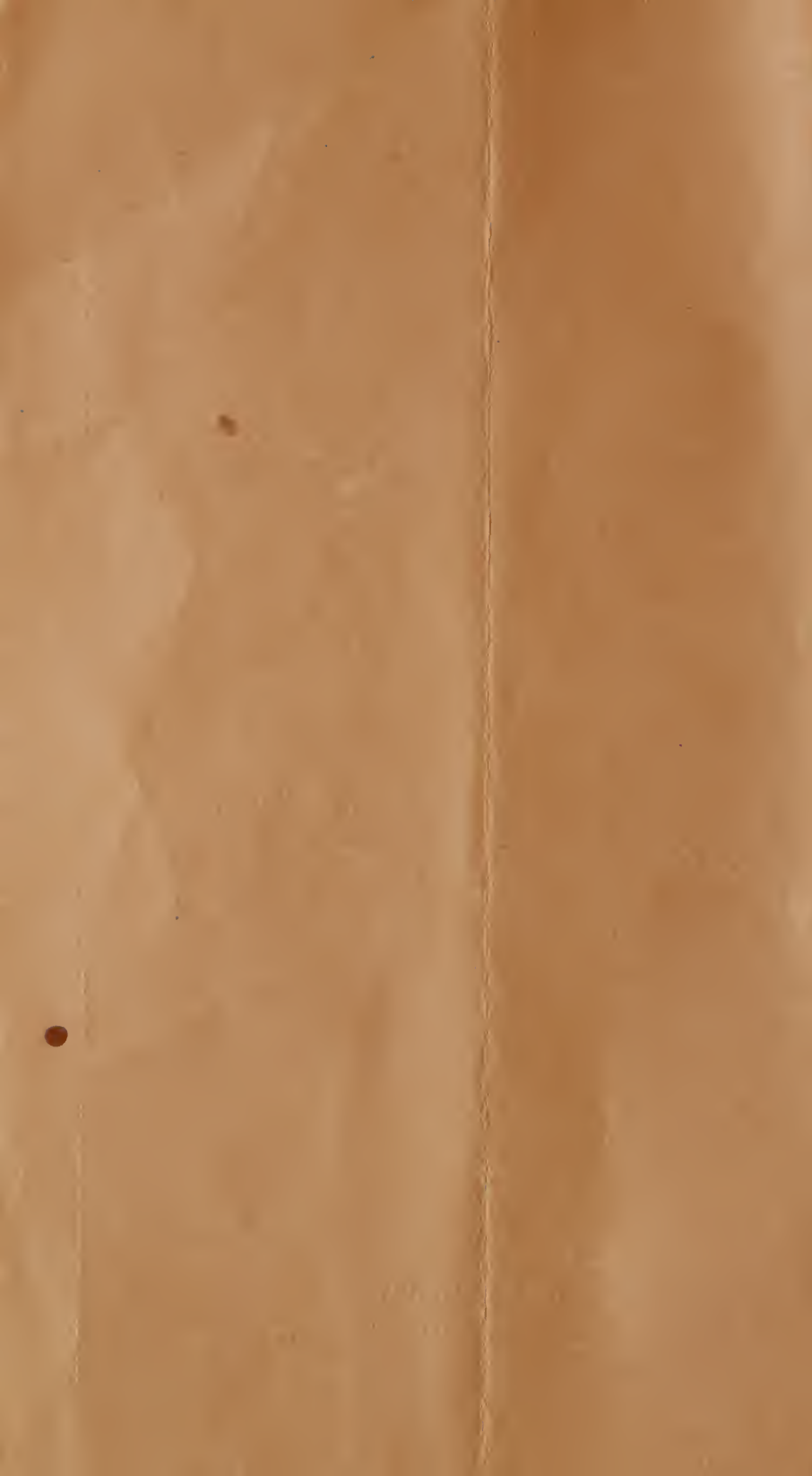
TO THE

SECRETARY OF THE INTERIOR.

1893.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.

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DEPARTMENT OF THE INTERIOR,
OFFICE OF SUPERINTENDENT OF
YELLOWSTONE NATIONAL PARK,
Mammoth Hot Springs, Wyo., July 27, 1893.

SIR: Complying with your request of the 18th instant, I respectfully submit the following report of operations and events in the Yellowstone National Park during the past year:

The tourist season experienced the usual vicissitudes. Following closely on the date of my last report came a substantial increase in travel, and the month of August, 1892, showed a larger volume than any preceding month. September opened well, but cold weather coming about the middle of the month kept tourists back, and the last ten days of the season travel was very slight.

During the winter more snow fell than usual. On June first I started through the Park ahead of the first load of regular visitors. The road was fairly good to the Upper Basin via the Fountain; it was absolutely impassable over the divide towards the Thumb. I made an effort to reach the canyon via Norris, but was obliged to turn back on the evening of June 3, when I was within 3 miles of the hotel.

At that time the snow averaged 3 feet deep over 8 miles of this road, and a repair party had been shoveling on it for three days. The first vehicle got to the canyon on the evening of June 4, and soon afterwards the hotel at that place was stocked and opened. A few days later the lake was reached, and that hotel was opened, but travel to it remained light until the way was cleared for the circuit via the Thumb. Early in June I instructed Capt. Scott, then in his camp at Lower Basin, to use every effort to open the road across the divide. He made several unsuccessful attempts, but finally, about June 20, he sent me word that he had been able to reach the Lake with a working party and a heavy wagon. I immediately started out, and was the first to pass over the road in a light vehicle, on June 25. The next day the road was formally opened for stage travel, and has been in use ever since.

I recall to your honor that snow was still found on the roadside on July 20, when you passed over it.

Notwithstanding an unusual fall of snow and a consequent late season, the travel for June was far better than ever before in that month. Doubtless the World's Fair has much to do with this, for the hotel registers show a large majority of foreigners from every quarter of the globe. I am sorry to have to report a very great falling off for this month.

There are several large excursions due in August, which will, I hope, restore the previous high average. In looking back over past reports and records I find that July has always been disappointing. Perhaps the financial situation of the country has somewhat to do with the falling off this year.

The regular travel last year amounted to 3,645. This, however, is independent of camping parties, of which no record is kept. With more general information about the beauties and wonders to be seen here the number of tourists should multiply many fold. In Germany the pupils of the common schools are taught of this Park, and the result is abundantly shown in the large number of Germans who annually visit it. Perhaps a wide distribution of some public document, giving a popular description of the Park and its wonders, would have the same effect in this country. I recommend the preparation and publication of such a pamphlet.

LEASES IN THE PARK.

The question of leases and franchises in the Park has come forward very prominently within the past year. The Yellowstone Park Association has reduced its plant somewhat, and now has hotels at four points only, viz: Mammoth Hot Springs, Fountain, Lake, and Canyon; and lunch stations at Norris, Upper Basin, and the Thumb.

Under the present law the association may only hold 10 acres of land under lease. This much it already has, so it could not, if it would, extend its accommodations. The benefits to the traveling public of a series of hotels under the same management must be apparent to all. No monopoly is created, for it can not be called monopoly when every charge is regulated by your Department. There is need of a hotel at Norris; perhaps one with twenty or thirty rooms, with ample kitchen and dining-room space, would answer for the immediate future. The old hotel at Upper Basin is this year used as a lunch station only. All tourists have to return for the night to the Fountain, and on the following morning make their third trip over this 10 miles. The obvious remedy is a good hotel at the Upper Basin, and this should be provided for without delay. The site of the present hotel is incomparably the best in the whole Basin, but unfortunately it is within the legal limit of "Old Faithful."

When the law was passed prohibiting the erection of any hotel within one-fourth of a mile of any geyser or other object of interest, it was the fear of Congress that people or corporations would obtain proprietary rights within the Park and charge visitors for the privilege of viewing its wonders. The progress of time has removed all that fear, and the law might well be repealed in general, or at least for this spot in particular. I also recommend the repeal of the law prohibiting leases for more than 10 acres to a single corporation. With these changes I should hope for an increase of accommodations that would add greatly to the pleasure and comfort of tourists.

The leases of the Yellowstone Park Association already cover all the ground to which they are legally entitled. The cottage hotel at this place is under their management, but not on their lease. It has been well managed, and serves a most useful purpose. The association should in some way be confirmed in its rights thereto. A lease for the site at the Fountain should be made out and delivered to it.

I recommend proceedings in condemnation, with a view to obtaining possession, for the government of the two frame cottages near the

mouth of Nez Perce Creek. They are much needed for the shelter of the troops stationed at that point each summer. The old barn and stable on the south side of the plateau, facing the hotel at this place, should be removed and placed at the foot of the bluff back of the hotel, as should also the old blacksmith shop and other old buildings near it. As at present situated they form a very unlovely foreground to an otherwise beautiful view. The old barn back of the cottage hotels with its surroundings is most unsightly. A slight expenditure for renovation would greatly add to its appearance. The Transportation Company has under lease all the ground to which it is legally entitled. Like the Park Association it has need of more, and this I hope may be granted. The company has leases and rights within the Park which are accompanied by corresponding obligations. Their lease requires them to keep transportation in full quantity, and at all times, for all the Park travel. They are required to keep all material of first quality; horses gentle and well broken; drivers sober, courteous, and capable. It would seem that under these circumstances they should be protected in their rights to the most of the Park travel.

I have had before me applications by the score for permits to carry on transportation business within the Park. I am well acquainted with many of these applicants, and others I know by repute. Several of them have regular "runners" at Livingston and on the trains between there and Cinnabar who make false promises about what their own line will do for tourists and false statements about what the regular line does do. The result is that at the present time they are getting a large percentage of the travel, and giving, as a rule, very poor service. I very often hear complaints on this score, but up to the present time I have been powerless to help it. Everyone who has traveled knows what a nuisance the hackman becomes about a depot or landing. These on the Park border are no exception to the rule. They do not carry any forage; their teams must either make the trip on what little grass they can gather during the night, or they get their grain by collusion with soldiers or employés within the Park.

There are, of course, people of limited means who wish to make a tour of the Park cheaply, and others who prefer to make a camping tour. I see no objection to allowing one or two approved parties to carry on this kind of business; but I recommend that licenses be refused all others, or that they be placed under such careful and close supervision as will abate the present nuisance. There is no municipality that does not license and arbitrarily supervise its cab service, and such supervision is doubly necessary at this place.

The leases of Mr. F. Jay Haynes and Mr. John Yancy will soon expire. Mr. Haynes has few equals as a photographer in this country. He has improved and beautified his grounds here, and has conducted his business very satisfactorily. I have recommended that his lease be extended.

There is also satisfactory reason for approving the extension to Mr. Yancy. He keeps a very primitive kind of a place, but it gives the necessary accommodations to the fishing parties that go there, as well as to travelers on the Cooke City road. When the projected road over Mount Washburn is completed a hotel near Tower Falls will be needed; but that should be independent of, and different in character from, the one now kept by Mr. Yancy.

I have recently approved the application of Mr. French for lease of certain parcels of land here, at Yancy's, and at Soda Butte. These are of no benefit to the Park or to Park travel, but are only of use in con-

nection with his contract to carry the mail to Cooke City. Should anything cause the mail route to be abandoned, these leases should all be canceled. Right to keep a small store, with such articles as are generally needed by tourists, should be granted. Such a store, with very limited stock, is now satisfactorily conducted by the postmaster, Mrs. George Ash. There has been no change in regard to the boat company's leases, and none is recommended. I think, however, that authority might be granted to some one to maintain one or more naphtha launches on the Lake. It seems to me that there should be some profit in the venture. Applications for a few other minor permits have been sent you with my approval.

BOUNDARY LINES OF THE PARK.

After an existence of more than twenty-one years the boundaries of the Park still remain unmarked. I have submitted for the consideration of the Department a question concerning the northern boundary. There is a question as yet undecided relative to the western boundary. Once these are finally settled the work of actually locating and plainly marking the entire line should be prosecuted with vigor. The timber reservation on the east and south of the Park has been placed under the "same rules and regulations as obtain within the Park;" in fact, it has become a part of the Park. A contract has been let for a survey of the lines of this addition. No work more useful for the protection of the Park has yet been undertaken. I hope another season will see the north and east lines carefully run and marked, and the greatest obstacle to the control and protection of the Park thus eliminated.

There are those who wish to cut off portions of the Park whenever selfish or mercenary interests ask it. As now constituted, including the timber reserve, it is devoted to the pleasure, the instruction, and the benefit of the whole people. The slightest encroachment upon its limits but opens the door to further dismemberment. I am positively opposed to all of these schemes, and particularly to the one known as the "segregation" bill, which proposes to hand over to the hundred or less inhabitants of Cooke City the most valuable section in the north part of the Park. I still adhere to the remarks on this subject in my report for the last year, to which I invite your attention. No more visionary scheme was ever conceived than that of running a railroad from Cinnabar to Cooke City for the poor mineral prospect that exists there.

The "promoters" of this scheme say that the mineral wealth of the district is "generally conceded," but no mining expert of reputation and character has ever reported otherwise than against it. The sworn testimony of Mr. T. F. Oakes, president of the Northern Pacific Railroad, on page 226, House Report No. 1956, first session Fifty-second Congress, says: "There is nothing in Cooke City mines, and we don't want a railroad there;" and further, that it would not be profitable to build a road there, and that he "did not want it." If such a concession is ever made, I trust it will be coupled with a condition that no part of the land shall be given over to other than railroad uses, and that it shall revert to the Park if the road is not completed within two years at the furthest. When the contractor for the survey of the timber reserve reaches here I purpose going with him to the initial point of his survey, "the easternmost point of Yellowstone Lake." I shall also go, if practicable, to the point 10 miles east of there, where he begins his boundary line. These points I desire should be well monumented, as it is not likely that any future dismemberment of the Park will change them.

PROTECTION OF FORESTS.

After two summers of remarkably good fortune in dealing with forest fires I have this year to report a most disastrous one. During the month of June the rainfall was but 0.38 inch, which is less than ever before recorded. In July, thus far, there has been practically no rain. The result is, all vegetation is dead and dry and ready for a conflagration on the slightest exposure. On July 10, about 1:20 p. m., I had a telegram from the corporal stationed at Norris, saying a fire had started there and he needed a half dozen men to help extinguish it. Lieut. Nance was at drill with the troop. I immediately stopped drill, and in less than half an hour a sergeant and six men were en route to the scene. Just as they left the post I received a supplementary telegram saying the fire was beyond control. I then ordered the balance of the troop to start at once, and ordered Capt. Scott down from the Lower Basin with his troop. All the available men of both troops have been watching and fighting this fire for more than two weeks night and day. It is, I believe, under control, and unless the wind should bring it up anew, I hope to be able to withdraw the soldiers in a day or two.

Capt. Scott and Lieut. Nance, with their men, deserve hearty thanks for energy and perseverance in fighting against it. How it started is not definitely known. It occurred on the roadside, about half a mile north of the Norris station. Capt. Scott, who has investigated the matter, believes it originated with the party building the new road at that point. The party had left work and gone to their dinner when the fire was discovered in the place they were last working. It is possible, however, that it originated in a cigar carelessly thrown from a coach by a passing tourist. Unless rains soon come there is grave danger of a repetition of the case, and should more than one fire rage at a time, it would be impossible to control them, and the entire Park would be liable to destruction.

It has been reported to me that men have been heard to say that they would burn over the entire Park in return for my opposition to the segregation scheme. I know there are men in the country of just such character, yet I have small fear that they will actually carry out their threats.

The country recently burned over is very irregular in outline, and extends northeast from the Norris Station about 7 miles, and in places is 2 miles or more in width. There have been other fires started, but all were extinguished before serious damage occurred. This experience has taught me the necessity of strictly enforcing the penalty of expulsion against everyone who fails to absolutely extinguish his fires.

OUTPOSTS.

The system of outposts is the same as last year, with slight addition of force at some of them. I am sorry to say that poaching has gone on in spite of them, but I have no doubt they have done much good. My great trouble is to get noncommissioned officers to put in charge of them who are able and disposed to cope with the class of men who form the poaching population. A few very well-known transgressors living near the south and west boundaries need close watching. I need at least two more scouts for this purpose, and a trip to that country by a special agent of the Department, sent out for the purpose, would be productive of great good.

MILITARY QUARTERS.

Since my last report the only change in the military quarters here is the erection of a hospital, which is now approaching completion. Troop D, Sixth Cavalry, was retained during the winter and contributed much toward the efficient protection of the Park. I renew my suggestion that barracks, mess room, and stables be erected, and that the garrison be increased by the addition of a company of infantry. I have already made application for this to the War Department, and I hope your influence will be exerted to accomplish the end.

ROADS.

Of the roads I can say but little, as I have no voice in their construction or maintenance. Late last autumn about a mile of new road was begun immediately to the north of Norris. I think this road will soon be completed.

A road was laid out and begun which passed for a short distance down the Gibbon River, and thus avoided the Canyon Creek hill. It will be a great improvement on the old road, and I hope will soon be taken up again and pushed to completion. Nothing of importance has been done on it yet this year.

Some small repairs have been put on the road between the Upper Basin and the Thumb, but the important part, the causeway along the lake, is as yet untouched.

The new road is being cleared of timber from the Thumb towards Lewis Lake, and I presume will soon be in condition to be driven over, although still far from being a good road. In the present very meager state of the appropriations I do not think anything more should be done to it for the present.

About half a mile of very beautiful road was located and begun last fall, passing by the brink of the Upper Falls. It is now being prosecuted slowly, and I presume will be open to travel by the close of the season. Lieut. Chittenden promised last October that it should be completed last June, but some unfortunate changes have operated to delay it. A third of a mile of driveway has also been opened near the Grand Canyon at Inspiration Point. These, I believe, comprise about all the improvements made from last year's appropriation.

At the opening of the season this year we were again confronted with a lack of funds for road repairs. This is one of the great evils of leaving the distribution of the money to one who resides so far from the work. The officer now in charge of road work has made, officially, a slighting remark about the "engineering experience" and "business methods essential to the economical and efficient expenditure of large sums of money." In face of all this I prefer to still remain the "police" officer, but to have some little say as to the direction in which the money shall be expended. A more leisurely reading of my last annual report would have shown that this is all I then asked for. The unfortunate relief of Lieut. Chittenden last spring has been a most serious blow to road building here. He was greatly interested in his work, tireless in his attentions to it, and ably equipped for it.

I renew the recommendation that the acting superintendent of the Park be given the control of the work, and that an officer of the Corps of Engineers be detailed to report to him to superintend it, make the detailed plans, and disburse the appropriations. The benefits that would result are too apparent to need explanation.

HOTELS.

The hotels are again managed by Mr. J. H. Dean, who has proved himself thoroughly fitted for the position. Considering the distance they are from the markets and the distance many of them are from the railroad, I regard them as excellent. The rates at all are fixed by the Department at \$4 per day. After six days this rate is made \$3 by the hotel management, with a view of inducing people to remain longer than the time necessary for the straight tour. But few take advantage of this reduction, as people generally arrive with their plans made for a trip of definite duration, and find it difficult to change these plans after they get here. The rooms are clean and comfortable, and the fare, though plain, is very good. The prices are lower than obtain in any of the first-class summer resorts of the country, and I see no reason why a "stay in the Park," rather than a "tour of the Park," should not be the rule. There is certainly much to interest and instruct the visitor at everyone of its hotels.

TRANSPORTATION.

The company of which Mr. S. S. Huntley is manager still has the lease for transportation privileges. Notwithstanding this fact outside parties by their system of "runners," giving false information and bad advice, secure a large share of the travel. The regular company has remarkably fine transportation. Their horses are well fed, well broken and safe, and vehicles and harness are excellent and well kept. Drivers as a rule, are competent, courteous, and sober. So long as this company is required to have an abundance of transportation of this kind for all the travel they should be protected in their rights to it. As stated previously, it can not be regarded as a monopoly when prices and conditions are arbitrarily imposed by the Department. The vexed question of stop-over privileges has been quite satisfactorily arranged by the stages starting out for the trip with a certain percentage of vacant seats, ready to pick up any passengers who may have remained behind on a previous tour. This has much reduced the complaints heretofore prevalent on this point. A tourist now has simply to notify the company of the day on which he wants to go forward, and a seat is provided for him.

A good many people continue to reach the Park via Beaver Canyon, on the Utah Northern Railroad (Union Pacific). Transportation on this route is furnished mainly by the Bassett Brothers. They hold no leases within the Park, nor have they, as I am aware, any authority under which their business is carried on. It is best for all interested that some one should hold a regular lease for transportation from that point to and through the Park; that he be required to have the same class of transportation as the regular company now has, and that he be protected in his efforts to maintain a high standard by having an exclusive right, with prices adjusted by the Department to a moderate rate of profit. To many, the most enjoyable way of seeing the Park is with a camping party. Others can not afford to see it in any other way. Hence, well-equipped and organized camping transportation is a necessity. Mr. Wylie has established such a line, and advertises regular excursions with fixed dates of start and return. To this part of his business I see no possible objection. He has, however, made application for leases to plots of ground in various parts of the Park whereon to establish permanent camps. The great objection to granting these

leases is the fact that a permanent camp is only a step removed from a shanty or a "shack," and it would be a desecration of the Park to allow such to spring up. Furthermore, we should recognize the right of those who come with their own transportation to use any unoccupied bit of ground for their camps.

I have recently posted a notice requiring camping parties to thoroughly police their camp grounds before leaving, but it has not been satisfactorily observed as yet. Perhaps a few expulsions for nonobservance will act as a stimulus.

BOAT ON THE LAKE.

The steamer continues to be satisfactorily run, and is greatly enjoyed by all tourists who make the trip on it. There are complaints that an extra fare is charged for the ride, but people who do not care to pay it have the option of going on the Lake Hotel from the Thumb in the regular coaches without extra price. If the amount of travel on the boat would warrant a reduction of fare, and the transportation company could make a small refund to those who used the boat, I believe all cause of complaint would be removed. The boat company keeps small boats and fishing-tackle enough to accommodate all who wish to make use of them to enjoy the unequalled sport on the lake. The addition of one or more launches would be a convenience, and probably prove remunerative.

ELEVATOR AT THE CANYON.

Mr. D. B. May has renewed his application for leave to place an incline or elevator in the Canyon, enabling people to make a descent to the bottom near the foot of the lower falls. To this project I am very strongly opposed. The elevator will be an unsightly object against the beautiful walls of the Canyon, will land its passengers where they can not get an extended view in any direction, and in my opinion will not prove a profitable venture. On inquiry I find more tourists who would not go down it if paid to do so than I find willing to pay for the trip.

TOURISTS.

Last year all names written or scratched on the beautiful geyser formations were erased. That made it possible to detect any new ones, and to apply needed discipline to the perpetrators of this foolish vanity. Several parties were arrested and sent back to erase their names, and the influence of these examples was excellent. It is worthy of note that a great majority of the names thus written are in a hand exhibiting lack of familiarity with writing implements. Specimen hunters also continue their vandalism, but with the careful watch kept by the soldier guards about the formations this trouble is kept at a minimum.

After the close of the Upper Basin Hotel last October someone—probably one of the help from the hotel, or one of the drivers who brought them out—broke a piece from the beautiful edge of the "Sponge geyser." I made every effort to discover the perpetrators, but without success. A remedy I should apply in future would be to prohibit any of these parties from ever again taking service within the Park. Camping parties continue to leave their fires unextinguished,

and for this, under a wise regulation, they are expelled from the Park. Several cases of the kind have occurred this year, and I have rigidly exacted the penalty.

I find tourists who complain, sometimes with reason, but oftener without a show of it. As an example of the latter class I cite a case that has just occurred. A man came through on a pass covering railroad and stage transportation and hotel bills. This was given him, I understand, because he was to write up the Park for some paper with which he was connected. At the lake he wandered off to fish, and when his stage was ready he was nowhere to be found. After a wait and a search the stage drove to the Canyon without him, but did take his baggage. He hired a conveyance for \$2.50 from outside parties to take him to the Canyon, and then demanded that this money be repaid him by the regular transportation company. I doubt if any other case has occurred quite as illustrative as this one.

I have also to note that since this report was begun I have discovered a way of "scalping" Park tickets. A man buys a ticket for the tour at \$60 from Livingston. One of the proprietors of outside transportation meets him and offers to take him through with a camping party and accepts the ticket for pay. The ticket is then held by the man who takes it up, until he finds a party who declines to go through with him. To this man he offers the regular ticket for \$50. The result of this is that the "scalper" gets \$50 for taking a man through with a camping outfit, and has a double chance at tourists. I have forbidden all persons caught at this work doing any further business within the Park.

The regulation promulgated last January forbidding firearms being carried in the Park without the written permission of the acting superintendent has been productive of much good, and its beneficial effects will increase as time goes on. Its execution adds much to the work of this office and of the outposts, but the result is worth the trouble. Some parties manage to escape detection until their tour is nearly or quite completed, but a room full of surrendered arms is testimony to the fairly efficient execution of the rule. Last summer Lieut. Chittenden collected some very interesting statistics which should come to your attention and receive publicity. To get an accurate expression of opinion, he took from the hotel register each day the name of one tourist at random, except that he never took one whom he knew personally. He thus got people from all parts of the country, from all stations in life, and of all occupations.

On October 22 he addressed to these people the three following questions:

First. What was the principal drawback to the enjoyment of your tour of the Park?

Second. From the experience of your own tour would you advise your friends to visit the Park?

Third. Assuming that there were a complete system of thoroughly macadamized or graveled roads, so constructed as to largely eliminate the mud and dust nuisance, and on which there would be no hills so steep that teams could not ascend them at a trot, and assuming also that there were a well-equipped electric railway covering substantially the same route, by which method would you prefer to make the tour of the Park—by coach or car?

Everybody took the greatest interest in giving full answers, and often went to some length to emphasize their disapproval of any scheme to put railroads of any kind in the Park. In nearly every letter other members of the party took occasion to add their views, so Lieut. Chit-

tenden got a good many more answers than he sent letters. About thirty letters never found their destination and were returned. The following is the vote:

First question, drawbacks: Roads, 91; hotels, 26 (Upper Basin and Norris complained of); transportation, 17; mosquitos and flies, 17; weather, 2; water, 2; steamboat charges, 2; no guides, 1; geysers failed, 1; no drawback, 24; no answer, 4.

Second question, advice as to visiting Park: Yes, 135; no, 2; no answer, 4.

Second question, coach or car: Coach, 145; car, 25.

A great many, however, said that they voted for the coach only on the condition of having roads as specified. With a majority of 6 to 1 against it, I believe the project for an electric road very undesirable.

FISH.

During the season fish are taken in the lakes and rivers in numbers almost passing belief. I would question the propriety of permitting the sport to go unchecked, were it not for the fact that their numbers are apparently undiminished.

All streams heretofore stocked with trout now furnish excellent fishing; probably no better exists anywhere.

Some months since I wrote the Commissioner of Fish and Fisheries concerning the advisability of stocking certain waters with black bass. In reply he informed me that a temperature of 65° was necessary for the spawn to hatch. I have had temperatures taken in these waters, showing temperatures in excess of 65°, and now have a promise from the Commissioner that the plant will be made as soon as he can arrange for it. He has also promised to make plants of the Eastern brook trout in Moose and Shoshone creeks.

WORK DONE IN THE PARK.

Few people would credit the fact that in my management of the Park I have only an allowance of a few hundred dollars each year for all expenses. Since my last report I have had authority to expend just \$500, of which sum \$150 still remains to my credit. All expended so far this year has been for policing camping places near the traveled roads. Last year I made some expenditures for repainting signboards and some for opening roads, but the meager allowance this year will not permit of such luxuries. There is, as you know, an appropriation for "constructing and repairing roads," but with this I have nothing to do. The only money allowed me for the complete management of the Park is the small rents collected from those who hold leases here. This, I believe, aggregates less than \$1,000 per year. Such a sum annually for the protection of an area larger than the State of Connecticut is an absurdity that one needs only to mention. No State or city in the land would thus neglect the smallest of its public parks or reservations.

I trust you will find it in your power to secure from Congress an allowance with which I can make a beginning on the many bits of work that need attention. A great deal of work of all kinds is done by the troops, but it is neither right nor just that it should be so. Their duties are sufficiently numerous and onerous in protecting the Park from poachers and guarding the formations from the vandalism of specimen hunters, etc.

POACHERS.

As the game diminishes in the adjacent States, professional hunters and trappers become more bold and more active. Montana, Idaho, and Wyoming all have stringent game laws, but in spite of them the game grows rapidly less. In Montana no conviction has yet been had under the law, and I do not believe one is possible. In Idaho it is much the same. In Wyoming the law is more strictly enforced, and arrests and convictions frequently occur. A stringent law, with severe penalties, is one of the most urgent needs of the Park. In this immense area, surrounded by a very rough and densely timbered country, it is impossible to give our large game the protection that it should have. With the addition of two men as scouts and an occasional trip about the Park borders by a special agent of the Department much good could be accomplished. Nothing but a law with severe penalties will entirely break up the evil. Confiscation of the outfit, under existing regulations, has but little effect, as the outfit is generally worthless.

Bears are being trapped near all the boundaries. Beaver are still being trapped in all parts of the Park. Parties come into the Park in the spring on the pretense that they are seeking work on the roads or looking for team work. During the long wait involved they devote their time to trapping the fur-bearing animals, and it is almost impossible to catch them at it. I suggest as a remedy that no one, except those having leases or contracts in the Park, be allowed to camp in one place for more than two days. Of course exceptions could be made in cases of well-proven necessity. I have pretty reliable information that about a dozen buffalo were killed last winter, and it is not improbable that even more shared that fate. The heads of these were mounted by taxidermists in Livingston and Bozeman, notwithstanding the law that declares the possession of such parts *prima facie* evidence that the possessor killed the animals within the State. It would be a great assistance to me in the preservation of the game if some authorized person would begin prosecution of these dealers. Conviction probably would not be had, but the annoyance to them and the publicity of the cases would have good effect.

GAME.

Buffalo.—The buffalo have been seen often during the year, and they appear to be doing well. In all the herds a fair proportion of calves is found. Those killed have been mostly bulls, so the capacity of the herds for increase has not been diminished. Late in June a herd of fifty to sixty crossed the road from west to east near the Riverside Geyser. Thirteen calves were counted. They were very tame, and not the least scared by the soldiers who went among them. The estimate of four hundred placed on their number last year is surely not too high.

Moose.—Within the past year a good many moose have been seen near the outpost on Snake River. In June a band of seven, with three calves, was seen in that vicinity, and others have been seen all along the south line. The establishment of that station has done much to protect them.

Mountain sheep.—These animals are found in several parts of the Park, but the most of them are near the north line. A fine bunch winters each year on Mount Everts, not more than 2 miles from this point. I saw them several times last winter, and one day in February

I drove within 75 yards of about a dozen, and they paid not the slightest attention to me. Segregation would result in the destruction of the herd in the northeast corner of the Park, which is probably the largest one anywhere remaining.

Elk.—For some reason the elk did not winter in the Hayden Valley in the same numbers as formerly. There were abundant signs of them in the autumn, and they reappeared again in the spring. Perhaps many of them staid in the open valley of the Pelican. The usual large herd wintered in the valley of the East Fork, between Yancy's and Soda Butte. I still believe that there are 25,000 in the Park. While fighting the fire at Norris a few days ago the men saw a herd of about eighty with a large number of calves.

Bears.—The bears do not appear so numerous this year as formerly, although they are constantly being seen near the hotels. It is quite probable that the camping parties to which I have referred have trapped some of them out.

Antelope.—A herd of about four to five hundred wintered on Mount Everts and became very tame. They often approached the town of Gardiner to within a few hundred yards. There were one or two smaller herds in other parts of the Park.

Deer.—This spring I saw more deer than usual, and they are very tame. They are doubtless increasing rapidly.

Beaver signs are multiplying, and over large areas they receive fair protection. A beaver trap is so easy to set, and so difficult for one not knowing its whereabouts to find, that complete protection is impossible. The skins have become so valuable as to make this industry very remunerative.

Wolverines, badgers, porcupines, otters, and other animals are increasing rapidly and are often very tame. Ducks and geese breed in the Park in great numbers, and are not scared by the near approach of travelers.

CAPTURE OF ANIMALS.

The animals mentioned in my last report, with several others collected later, were sent to the National Zoölogical Park in Washington last November. I now have awaiting shipment four elk, one deer, three beavers, one badger, and one porcupine, besides a cage of smaller animals. During the season I hope to secure enough to quite fill a car. It would be a matter of great interest to tourists if I had the funds with which to erect an inclosure and put into it some specimens of the game animals here native. Some provision would have to be made for feeding them in the winter, but the expense would be very small. Elk, deer, and buffalo could easily be secured, and probably antelope, moose, and mountain sheep.

RECOMMENDATIONS.

First. The passage of an act defining the boundaries as recommended last year.

Second. The enactment of a law giving the Park a system of government.

Third. Complete the survey and the marking of the boundary lines.

Fourth. Transfer to the superintendent the disposal of the funds for road work.

Fifth. Liberal appropriations with which to complete the road system as approved.

Sixth. Appropriations for clearing out dead timber, collecting and keeping wild animals and in general for all means of preserving, protecting, and beautifying the Park.

Seventh. Provide accommodations for a company of infantry, to be made a part of the permanent garrison here.

These recommendations are for the most part a repetition of those made last year. My estimate of their importance leads me to again call your attention to them. I anticipate much benefit to the Park from your recent tour of it.

I extend my thanks to Capt. Scott, Sixth Cavalry, for the deep interest manifested by him in all that concerns the Park, and for his constant and tireless labors for its protection.

I am indebted to Surg. C. M. Gandy, U. S. Army, for the meteorological record hereto appended.

Yours, very respectfully,

GEO. S. ANDERSON,

Captain Sixth Cavalry,

Acting Superintendent Yellowstone National Park.

The SECRETARY OF THE INTERIOR.

Meteorological register.

JULY, 1892.							AUGUST, 1892.						
Date.	Maximum.	Minimum.	Range.	Winds.	Precipitation.	Remarks.	Date.	Maximum.	Minimum.	Range.	Winds.	Precipitation.	Remarks.
1	55	40	15	N.	0.10	Rain.	1	90	54	36	S.		
2	62	45	17	S.			2	82	55	27	S.		
3	66	41	25	S.			3	86	51	35	SW.		
4	81	46	35	S.			4	87	53	34	S.	0.07	Rain.
5	84	52	32	SW.			5	82	46	36	S.		
6	81	51	30	S.	0.13	Rain.	6	83	49	34	S.	0.06	Rain.
7	70	52	18	NW.			7	81	53	28	S.	0.27	Rain.
8	76	46	30	SW.			8	62	48	14	SW.	0.07	Rain.
9	76	57	19	S.	0.75	Rain.	9	75	38	37	SW.		
10	76	56	20	S.			10	83	44	39	S.		
11	68	52	16	S.			11	82	57	25	S.		
12	72	50	22	S.			12	76	50	26	SW.		
13	74	50	24	NW.			13	85	41	44	S.		
14	74	49	25	NW.			14	87	50	37	S.		
15	81	53	28	SW.			15	91	49	42	S.		
16	82	51	31	SW.			16	85	54	31	S.		
17	72	61	11	SW.			17	71	52	19	N.		
18	81	50	31	SW.			18	80	36	44	S.		
19	88	63	25	S.			19	73	49	24	N.		
20	89	51	38	S.			20	65	41	24	N.		
21	85	50	35	S.			21	79	38	41	N.		
22	80	50	30	SW.			22	70	47	23	NE.	0.02	Rain.
23	74	38	36	SE.			23	80	37	43	S.		
24	75	42	33	S.			24	62	44	18	N.		
25	76	39	39	S.			25	65	42	23	N.		
26	81	46	35	S.			26	74	32	42	S.		
27	62	45	17	N.			27	50	39	11	N.	0.15	Rain.
28	72	36	36	S.			28	55	32	23	NW.		
29	78	45	33	W.			29	75	30	45	S.		
30	80	84	36	S.			30	77	42	35	S.		
31	86	47	39	SW.			31	79	43	36	S.		
Total.	2,359	1,498	861				Total.	2,372	1,396	976			
Mean	76.10	48.32	27.77	S.	0.98		Mean	76.52	45.03	31.48	S.	0.64	

Maximum, 89, 20th instant; minimum, 36, 28th instant; monthly mean, 62.20; total precipitation 0.98; wind, south.

Maximum, 91, 15th instant; minimum, 30, 29th instant; mean, 60.77; total precipitation, 0.64; wind, south.

Meteorological register—Continued.

SEPTEMBER, 1892.							OCTOBER, 1892.						
Date.	Maximum.	Minimum.	Range.	Winds.	Precipitation.	Remarks.	Date.	Maximum.	Minimum.	Range.	Winds.	Precipitation.	Remarks.
1	73	47	26	S.	0.60	Rain.	1	50	45	5	SW.	0.22	Rain.
2	55	42	13	NW.	0.08	Rain.	2	66	35	31	S.	0.02	Rain.
3	65	37	28	W.	.....		3	71	35	36	S.	.....
4	75	38	37	S.	.....		4	69	34	35	SW.	.....
5	77	37	40	S.	.....		5	68	38	30	S.	.....
6	76	46	30	S.	.....		6	66	39	27	SW.	.....
7	62	38	24	N.	.....		7	68	31	37	S.	.....
8	72	32	40	S.	.....		8	71	38	33	S.	.....
9	68	42	26	N.	.....		9	60	40	20	SW.	.....
10	63	41	22	NW.	.....		10	51	40	11	SW.	.....
11	75	29	46	S.	.....		11	34	30	4	NW.	0.41	Sleet.
12	78	37	41	S.	.....		12	41	28	13	N.	0.10	Snow.
13	79	36	43	S.	.....		13	54	25	29	N.	.....
14	79	37	42	S.	.....		14	59	31	28	SW.	.....
15	82	39	43	S.	.....		15	51	30	21	SW.	.....
16	78	42	36	S.	.....		16	39	29	10	N.	.....
17	71	43	28	S.	.....		17	30	20	10	S.	.....
18	75	41	34	S.	.....		18	34	26	8	S.	.....
19	76	39	27	S.	.....		19	40	23	17	N.	0.02	Snow.
20	55	43	12	S.	.....		20	51	19	32	S.	0.02	
21	60	38	22	S.	.....		21	53	22	31	S.	.....
22	55	40	15	S.	0.25	Rain.	22	58	23	35	S.	.....
23	54	47	7	S.	0.16	Rain.	23	54	23	31	N.	.....
24	50	30	20	N.	0.40	Snow.	24	52	20	32	SW.	.....
25	67	40	27	S.	.....		25	52	21	31	N.	.....
26	74	40	34	SW.	.....		26	61	24	37	S.	.....
27	73	43	30	SW.	.....		27	60	31	29	S.	.....
28	76	40	36	S.	.....		28	57	27	30	S.	.....
29	75	51	24	S.	.....		29	53	30	23	S.	.....
30	73	47	26	S.	0.11	Rain.	30	57	23	34	S.	.....
31							31	41	31	10	SW.	.....
Total ..	2,091	1,202	889	.....	.....		Total ..	1,671	911	760	.....	.....
Mean ...	69.70	40.07	29.63	S.	01.60		Mean	53.90	29.39	24.52	S.	.79	

Maximum, 82, 15th instant; minimum, 29, 11th instant; mean, 54.73; total precipitation, 1.60; wind, south.

Maximum, 71, 8th instant; minimum, 19, 20th instant; mean, 41.65; total precipitation, 0.79; wind south.

Meteorological register—Continued.

NOVEMBER, 1892.							DECEMBER, 1892.						
Date.	Maximum.	Minimum.	Range.	Wind.	Precipitation.	Remarks.	Date.	Maximum.	Minimum.	Range.	Wind.	Precipitation.	Remarks.
1.....	46	25	21	N.	0.14	Snow.	1.....	30	18	12	SW.	0.35	Snow.
2.....	35	20	15	N.	0.05	Snow.	2.....	35	20	15	S.	.....	.....
3.....	37	29	8	N.	0.20	Snow.	3.....	40	33	7	S.	.....	.....
4.....	46	35	11	S.	.....	.....	4.....	33	28	5	S.	0.40	Snow.
5.....	47	34	13	S.	0.32	Rain.	5.....	25	16	9	N.	.....	.....
6.....	28	24	4	N.	0.05	Snow.	6.....	18	2	16	N.	0.12	Snow.
7.....	28	8	20	S.	.....	.....	7.....	13	-4	17	N.	.....	.....
8.....	27	19	8	S.	0.07	Snow.	8.....	19	5	14	S.	.....	.....
9.....	40	14	26	S.	.....	.....	9.....	18	3	15	S.	.....	.....
10.....	41	31	11	S.	.....	.....	10.....	17	7	10	S.	.....	.....
11.....	49	33	16	S.	.....	.....	11.....	11	-7	18	SW.	.....	.....
12.....	45	35	10	N.	.....	.....	12.....	17	3	14	SW.	.....	.....
13.....	37	21	16	S.	.....	.....	13.....	15	5	10	N.	.....	.....
14.....	31	28	3	N.	.....	.....	14.....	11	-8	19	N.	.....	.....
15.....	24	15	9	SW.	.....	.....	15.....	19	9	10	S.	0.40	Snow.
16.....	21	19	2	N.	.....	.....	16.....	16	13	3	N.	0.20	Snow.
17.....	25	8	17	SW.	.....	.....	17.....	15	-1	16	N.	.....	.....
18.....	32	19	13	S.	.....	.....	18.....	20	11	9	S.	0.25	Snow.
19.....	40	31	9	S.	.....	.....	19.....	10	4	6	N.	0.12	Snow.
20.....	35	21	14	S.	.....	.....	20.....	-2	-13	11	N.	.....	.....
21.....	40	31	9	S.	.....	.....	21.....	-6	-14	8	E.	0.10	Snow.
22.....	46	35	11	S.	.....	.....	22.....	25	-10	35	W.	0.16	Snow.
23.....	41	38	3	SW.	0.17	Rain.	23.....	34	24	10	S.	.....	.....
24.....	28	10	18	N.	0.35	Snow.	24.....	38	33	5	S.	.....	.....
25.....	20	6	14	NE.	.....	.....	25.....	36	32	4	S.	.....	.....
26.....	23	13	10	S.	.....	.....	26.....	37	25	12	S.	.....	.....
27.....	26	19	7	S.	.....	.....	27.....	36	30	6	S.	.....	.....
28.....	33	24	9	S.	.....	.....	28.....	22	16	6	N.	0.07	Snow.
29.....	38	30	8	E.	0.40	Snow.	29.....	21	19	2	S.	.....	.....
30.....	41	33	8	S.	0.15	Snow.	30.....	19	4	15	S.	.....	.....
							31.....	23	15	8	S.	.....	.....
Total..	1,050	707	343	.....	.....	.....	Total..	665	318	347	.....	.....	.....
Mean...	35.00	23.57	11.43	S.	1.90	.....	Mean...	21.45	10.26	11.19	S.	2.17	.....

Maximum, 49. 11th instant; minimum, 6. 25th instant; mean, 29.28; total precipitation, 1.90; wind, south; total depth of snow fall, 14.25 inches.

Maximum, 40; 3d instant; minimum, -14, 21st instant; mean, 13.85; total precipitation, 2.17; wind south; total depth of snowfall, 20.05 inches

Meteorological register—Continued.

JANUARY, 1893.							FEBRUARY, 1893.						
Date.	Maximum.	Minimum.	Range.	Wind.	Precipitation.	Remarks.	Date.	Maximum.	Minimum.	Range.	Wind.	Precipitation.	Remarks.
1	32	19	13	W.	.....		1	10	-16	26	SE.	.....
2	34	24	10	W.	.....		2	9	2	7	SE.	.....
3	36	24	12	SW.	.....		3	33	5	28	S.	0.20	Snow.
4	40	26	14	SW.	.....		4	31	22	9	S.	0.15	Snow.
5	34	18	16	W.	.....		5	23	15	8	S.	0.12	Snow.
6	35	19	16	N.	.....		6	17	-5	22	N.	.....
7	24	8	16	N.	.....		7	23	1	22	SW.	.....
8	36	15	21	S.	.....		8	20	7	13	SW.	0.10	Snow.
9	30	9	21	SE.	.....		9	22	12	10	SE.	.....
10	29	24	5	SW.	0.09	Snow.	10	25	14	11	S.	.....
11	23	19	4	N.	.....		11	27	3	24	S.	.....
12	24	6	18	S.	.....		12	32	23	10	S.	.....
13	19	11	8	N.	0.11	Snow.	13	19	14	5	N.	.....
14	12	4	8	N.	.....		14	15	-11	26	SW.	.....
15	4	-13	17	NW.	.....		15	26	9	17	S.	.....
16	12	-10	22	N.	.....		16	29	16	13	S.	.....
17	17	-3	20	NW.	.....		17	35	17	18	S.	.....
18	24	13	11	S.	.....		18	33	12	21	SW.	.....
19	22	8	14	S.	.....		19	36	12	24	S.	.....
20	25	8	17	S.	.....		20	38	13	25	S.	0.10	Snow.
21	29	13	16	S.	.....		21	24	21	3	N.	.....
22	30	18	12	SE.	.....		22	31	12	19	N.	.....
23	31	20	11	S.	.....		23	28	13	15	S.	.....
24	28	19	9	SW.	.....		24	20	5	15	SW.	.....
25	20	-1	21	N.	0.18	Snow.	25	29	5	24	N.	.....
26	29	-10	39	S.	.....		26	11	4	7	N.	0.12	Snow.
27	33	-5	38	S.	0.45	Snow.	27	10	-10	20	N.	.....
28	19	-14	33	S.	0.62	Snow.	28	11	-7	18	N.	.....
29	21	12	9	SE.	0.17	Snow.							
30	18	5	13	SE.	0.20	Snow.							
31	9	-28	37	SE.	.....							
Total..	779	258	521	.....	.....		Total..	667	207	460	.....	.....
Mean....	25.13	8.32	16.81	S.	1.82		Mean..	23.82	16.43	7.39	S.	0.79	

Maximum, 40.4th instant; minimum, 28, 31st instant; mean, 16.72; total precipitation, 1.82. Wind south; total depth of snowfall, 18.35 inches.

Maximum, 38, 20th instant; minimum, -16, 1st instant; mean, 20.12; total precipitation, 0.79; Wind, south; total depth snowfall, 8 inches.

Meteorological register—Continued.

MARCH, 1893.

Date.	Maximum.	Minimum.	Range.	Wind.	Precipitation.	Remarks.
1	21	2	19	S.	.....
2	28	8	20	S.	.....
3	29	-3	32	S.	.....
4	37	4	33	S.	.....
5	29	7	22	S.W.	0.10	Snow.
6	36	20	16	S.	.....
7	36	5	31	S.	.....
8	33	11	22	S.	.....
9	29	25	4	S.	.....
10	20	13	7	N.	.....
11	29	15	14	N.	.....
12	25	20	5	N.	.....
13	26	9	17	N.	.....
14	32	4	36	S.	.....
15	33	11	22	S.	.....
16	27	10	17	S.	0.17	Snow.
17	32	12	20	S.	.....
18	35	19	16	S.E.	.....
19	28	24	-4	N.	.....
20	32	9	23	N.	.....
21	28	21	7	S.W.	0.32	Snow.
22	32	15	17	N.	0.15	Snow.
23	33	16	17	N.	.....
24	35	18	17	S.	.....
25	33	23	10	N.	.....
26	36	26	10	S.	0.10	Snow.
27	37	16	21	S.	.....
28	50	28	22	S.	.....
29	54	36	18	S.	.....
30	43	38	5	N.	.....
31	35	25	10	S.	0.12	Snow.
Total.. 1.013 479 534						
Mean.. 32.68 15.45 7.23 S. 0.96						

Maximum, 54.29th instant; minimum, -4.14th instant; mean, 24.06; total precipitation, 0.96; wind, south; total depth of snowfall, 9.75 inches.

APRIL, 1893.

Date.	Maximum.	Minimum.	Range.	Wind.	Precipitation.	Remarks.
1	33	23	10	N.	0.25	Snow.
2	45	31	14	S.	.....
3	42	31	11	S.	.....
4	45	33	12	S.	.....
5	52	32	20	S.	.....
6	43	31	12	N.	.....
7	28	24	4	N.	.....
8	35	13	22	N.	.....
9	33	18	15	S.W.	.....
10	37	20	17	S.	.....
11	33	25	8	S.E.	0.12	Snow.
12	31	19	12	N.	0.07	Snow.
13	35	17	18	N.	0.02	Snow.
14	38	23	15	S.	.....
15	37	13	24	S.	.....
16	43	20	23	S.	.....
17	44	29	15	S.	.....
18	31	20	11	N.	.....
19	35	12	23	N.	.....
20	46	28	18	N.	0.20	Snow.
21	33	8	25	S.	.....
22	51	36	15	S.	.....
23	46	37	9	S.	.....
24	32	23	9	N.	0.16	Snow.
25	40	23	17	N.	.....
26	38	29	9	N.	0.15	Snow.
27	28	23	5	N.	.....
28	40	12	28	N.	.....
29	41	16	25	N.	.....
30	48	18	30	S.	.....
Total.. 1.163 687 476						
Mean.. 38.77 22.90 15.87 N. 0.97						

Maximum, 52.5th instant; minimum, 8.25th instant; mean, 30.83; total precipitation, 0.97; winds, north; total depth of snowfall, 9.80 inches.

